

What Is Claimed Is:

1 / A system for delivering therapeutic to an irregular interior vessel surface comprising:  
1      a catheter having a proximal end, a distal end, and an internal lumen;  
2      a source of fluid in communication with the internal lumen of the catheter; and  
3      a first inflatable balloon having an exterior surface,  
4                  the first inflatable balloon in communication with the internal lumen of the  
5      catheter,  
6                  the first inflatable balloon being hyper-deformable, and  
7                  the exterior surface of the first inflatable balloon in communication with a  
8      therapeutic when the first inflatable balloon is in an expanded state.  
9

1      2. The system for delivering therapeutic of claim 1 wherein the exterior surface of the first  
2      inflatable balloon is covered with a therapeutic.

1      3. The system for delivering therapeutic of claim 1 further comprising:  
2                  a source of therapeutic, the source of therapeutic in fluid communication with the  
3      exterior surface of the first inflatable balloon.

1      4. The system for delivering therapeutic of claim 3 wherein the therapeutic traverses  
2      through a section of the first inflatable balloon before the therapeutic comes in communication  
3      with the exterior surface of the first inflatable balloon.

1       5. The system for delivering therapeutic of claim 1 further comprising:  
2              a dilation bladder located within the first inflatable balloon,  
3                      the dilation bladder in fluid communication with the proximal end of the  
4              catheter,  
5                      the dilation bladder deformable from a non-inflated position to an inflated  
6              position.

1       6. The system for delivering therapeutic of claim 1 further comprising:  
2              a second inflatable balloon, the second inflatable balloon located within the first  
3              inflatable balloon,  
4                      the second inflatable balloon having an outside surface, the outside surface  
5              in communication with a source of therapeutic,  
6                      the first inflatable balloon having a plurality of apertures in fluid  
7              communication with the outside surface of the second inflatable balloon.

1       7. The system for delivering therapeutic of claim 1 further comprising:  
2              a second internal lumen within the catheter,  
3                      the first inflatable balloon positioned around the second internal lumen,  
4              the second internal lumen having an entrance orifice and an exit orifice,  
5                      the entrance orifice positioned upstream of the inflatable balloon,  
6              upstream relative to a fluid flowing through the irregular interior vessel, and the exit orifice  
7              positioned downstream of the inflatable balloon, downstream relative to fluid flowing through  
8              the irregular interior vessel.

1       8. The system for delivering therapeutic of claim 1 wherein the first inflatable balloon is  
2      made with a latex material and wherein the source of fluid is adapted to control the rate of  
3      inflation of the balloon.

1       9.     The system for delivering therapeutic of claim 1 wherein the first inflatable balloon is  
2 made with a silicone material and wherein the source of fluid is adapted to control the rate of  
3 inflation of the balloon.

1       10.    The system for delivering therapeutic of claim 1 wherein the first inflatable balloon is  
2 made with a polyurethane material and wherein the source of fluid is adapted to control the rate  
3 of inflation of the balloon.

1       11.    The system for delivering therapeutic of claim 1 wherein the first inflatable balloon is  
2 porous relative to the therapeutic being delivered.

1       12.    A device for delivering therapeutic to an irregular interior vessel surface comprising:  
2              a catheter having a proximal end, a distal end, and an internal lumen;  
3              a hyper-deformable inflatable balloon in fluid communication with the internal  
4              lumen of the catheter, the hyper-deformable inflatable balloon having an exterior surface and an  
5              interior surface;  
6              a source of fluid in fluid communication with the internal lumen; and  
7              a fluid pump in fluid communication with the source of fluid.

1       13.    The device of claim 12 wherein the exterior surface of the hyper-deformable inflatable  
2              balloon is in contact with a therapeutic.

1       14.    The device of claim 12 further comprising:  
2              a source of therapeutic, the source of therapeutic in fluid communication with the  
3              exterior surface of the hyper-deformable inflatable balloon.

1       15. The device of claim 14 wherein the therapeutic traverses through the hyper-deformable  
2       inflatable balloon before the therapeutic contacts the exterior surface of the hyper-deformable  
3       inflatable balloon.

1       16      The device of claim 14 further comprising:  
2                  a dilation bladder located within the hyper-deformable inflatable balloon,  
3                  the dilation bladder in fluid communication with the proximal end of the  
4       catheter,  
5                  the dilation bladder deformable from a non-inflated position to an inflated  
6       position.

1       17. The device of claim 16 further comprising:  
2                  a second internal lumen within the catheter,  
3                  the second internal lumen passing through the hyper-deformable inflatable  
4       balloon, the hyper-deformable inflatable balloon positioned around the second internal lumen,  
5                  the second internal lumen having an entrance orifice and an exit orifice,  
6                  the entrance orifice positioned upstream of the hyper-deformable  
7       inflatable balloon, upstream relative to a fluid flowing through the irregular interior vessel, and  
8                  the exit orifice positioned downstream of the hyper-deformable inflatable balloon, downstream  
9       relative to fluid flowing through the irregular interior vessel.

1       18. The device of claim 16 further comprising:  
2                  a second balloon positioned between the dilation bladder and the hyper-  
3       deformable inflatable balloon, the second balloon having an outside surface, the outside surface  
4       in communication with therapeutic.

1       19. The device of claim 12 wherein the hyper-deformable inflatable balloon is made with a  
2       latex material.

1       20. A method for delivering therapeutic to an irregular interior vessel surface of a patient  
2       comprising:

3              inserting an expandable hyper-deformable membrane into the vessel of the  
4       patient, the expandable hyper-deformable membrane having an exterior surface;  
5              positioning the expandable hyper-deformable membrane at an irregular interior  
6       surface of the vessel within the patient; and  
7              forcing fluid into the expandable hyper-deformable membrane to expand the  
8       expandable hyper-deformable membrane, the expandable hyper-deformable membrane becoming  
9       juxtaposed to the irregular interior surface of the vessel of the patient.

1       21. The method of claim 20 wherein the exterior surface of the expandable hyper-deformable  
2       membrane is in communication with a therapeutic.

1       22. The method of claim 20 further comprising:

2              pushing a therapeutic over the exterior surface of the expandable hyper-  
3       deformable membrane after the expandable hyper-deformable membrane is positioned at the  
4       irregular interior surface of the vessel.

1       23. The method of claim 22 wherein the therapeutic is pushed through the expandable hyper-  
2       deformable membrane to reach the exterior surface of the expandable hyper-deformable  
3       membrane and wherein the fluid is a tracing fluid.

1       24. The method of claim 20 further comprising:

2                   after positioning the expandable hyper-deformable membrane at the irregular  
3                   interior surface of the vessel within the patient, inflating a dilation bladder located within the  
4                   expandable hyper-deformable membrane.

1       25. The method of claim 20 further comprising:

2                   opening an entrance orifice of a passage traversing the expandable hyper-  
3                   deformable membrane, the passage compatible with fluid flowing within the vessel of the  
4                   patient's body.